

APPLICABLE CODES AND STANDARDS

- 2012 ARKANSAS FIRE PREVENTION CODE (ADOPTS THE FOLLOWING BY REFERENCE):
  - 2012 INTERNATIONAL BUILDING CODE
  - 2012 INTERNATIONAL FIRE CODE
  - 2012 NFPA 101 - LIFE SAFETY CODE
- INTERNATIONAL BUILDING CODE 2012 - FOR TYPE OF CONSTRUCTION
- NFPA 101 2012 - LIFE SAFETY CODE - FOR LIFE SAFETY AND EGRESS
- NFPA 10 2013 - STANDARD FOR PORTABLE FIRE EXTINGUISHERS
- NFPA 13 2013 - STANDARD FOR THE INSTALLATION OF SPRINKLER SYSTEMS
- NFPA 70 2011 - NATIONAL ELECTRIC CODE
- NFPA 72 2013 - NATIONAL FIRE ALARM AND SIGNALING CODE
- NFPA 90A 2012 - STANDARD FOR THE INSTALLATION OF AIR-CONDITIONING SYSTEMS
- NFPA 291 2013 - RECOMMENDED PRACTICE FOR FIRE FLOW TESTING AND MARKING OF HYDRANTS
- VA TIL - TECHNICAL INFORMATION LIBRARY

OCCUPANCY / CONSTRUCTION CLASSIFICATION

BUILDING DESCRIPTION	THIS FACILITY IS A VETERAN'S ADMINISTRATION HOSPITAL EMERGENCY DEPARTMENT MENTAL HEALTH
OCCUPANCY CLASSIFICATION	
PRIMARY USE	INSTITUTIONAL - GROUP I-2 (WITH NON-SEPARATED ACCESSORY USES)
ACCESSORY USE	SEE AREA TABLES AND IBC SECTION 308
CONSTRUCTION CLASSIFICATION	I-B PER IBC / II (222) PER NFPA 101
SPRINKLER SYSTEM	COMPLETE FIRE SPRINKLER SYSTEM WILL BE INSTALLED PER DRAWINGS
HAZARD	PRIMARILY LIGHT HAZARD WITH QUICK RESPONSE SPRINKLERS THROUGHOUT SOME AREAS MAY REQUIRE A HIGHER DENSITY AND WILL BE NOTED AS SUCH ON THE PLANS

ALLOWABLE HEIGHT AND AREA

OCCUPANCY I-2 / BUILDING CONSTRUCTION I-B	
TABULAR AREA	UNLIMITED
TABULAR HEIGHT	160'
TABULAR STORIES	4 STORIES

WITH SPRINKLER SYSTEM:	
TOTAL AREA	UNLIMITED
TOTAL HEIGHT	180'
TOTAL STORIES	5 STORIES

EXITING AND EGRESS REQUIREMENTS

TOTAL OCCUPANTS	204
EXITS REQUIRED	2 (PER NFPA 101 18.2.4)
EXITS PROVIDED	5
MAXIMUM TRAVEL DISTANCE	200 FEET - TO EXIT OR SMOKE BARRIER
COMMON PATH	100 FEET
DEAD END LENGTH	30 FEET
EGRESS WIDTH	0.2" PER PERSON
MINIMUM CORRIDOR WIDTH	72" FOR INSTITUTIONAL OCCUPANCIES 96" WHEN REQUIRED FOR BED MOVEMENT PER NFPA 101 18.2.3.4
CLEAR OPENING DOOR WIDTH	32" MINIMUM 41.5" WHEN REQUIRED FOR BED MOVEMENT
EGRESS CAPACITY	204 OCCUPANTS * 0.2" PER OCCUPANT = 40.8" TOTAL EGRESS REQUIRED 32" MINIMUM DOOR * 2 EXITS = 376" MINIMUM EGRESS PROVIDED
SMOKE RESISTIVE WALLS	AT CORRIDOR WALLS AND DOORS (NOT REQUIRED TO BE RATED, JUST RESIST PASSAGE PER NFPA 101 18.3.6.2/3)
SMOKE BARRIER	ONE PROVIDED WITH ONE-HOUR FIRE RESISTANCE RATING PER NFPA 101 18.3.7.3 - SEE PLAN FOR
LOCATION	
SMOKE BARRIER AREA	<22,500 SQUARE FEET
SMOKE PARTITION REFUGE AREA	NOT LESS THAN 30 SQUARE FEET PER PATIENT SHALL BE PROVIDED ON EACH SIDE OF THE BARRIER UTILIZING PATIENT ROOMS, CORRIDORS, TREATMENT AREAS, AND OTHER LOW-HAZARD AREAS.
ILLUMINATION OF EGRESS	1 FT-CANDLE AT THE FLOOR AND 0.2 FT-CANDLES FOR A SINGLE LIGHT FAILURE
EMERGENCY EGRESS LIGHTING	EXIT ACCESS AND DISCHARGE ONLY. ACCESS INCLUDES DESIGNATED CORRIDORS, AISLES AND PASSAGEWAYS. DISCHARGE INCLUDES DESIGNATED DOORS, WALKWAYS, AND RAMPS LEADING TO A PUBLIC WAY. PERFORMANCE PER NFPA 101 7.9.
EXIT MARKING	MARKING OF EXITS AND THE MEANS OF EGRESS SHALL BE PER NFPA 101 7.10.

INTERIOR FINISH REQUIREMENTS

HEALTH CARE - NEW WALL AND CEILING FINISHES	EXITS A	EXIT ACCESS CORRIDORS A	OTHER SPACES A
FLOOR COVERINGS	I or II	B - ON LOWER PORTION OF WALL I or II	B - IN SMALL INDIVIDUAL ROOMS N/A

CONSTRUCTION REQUIREMENTS

STRUCTURAL ELEMENT	FIRE-RESISTANCE RATING
STRUCTURAL FRAME	2 HOURS
BEARING WALLS	
EXTERIOR	2 HOURS
INTERIOR	2 HOURS
NONBEARING WALLS	
EXTERIOR	SEE BELOW
INTERIOR	0 HOURS - SEE HAZARD SECTION
FLOOR CONSTRUCTION	2 HOURS
ROOF CONSTRUCTION	1 HOURS
VERTICAL OPENINGS	
3 STORIES OR LESS	1 HOUR
4 STORIES OR MORE	2 HOURS

HAZARD PROTECTION REQUIREMENTS

OPENING PROTECTIVES	IF WALL IS RATED:	THEN RATE DOORS:	AND WINDOWS AS:
ELEVATOR HOISTWAY	2 HOURS	1.5 HOURS	NP/ W-120 MINUTES
	1 HOUR	1 HOUR	NP/ W-60 MINUTES
VERTICAL SHAFTS (STAIRS, EXITS AND TRASH CHUTES)	2 HOURS	1.5 HOURS	NP/ W-120 MINUTES
	1 HOUR	1 HOUR	NP/ W-60 MINUTES
FIRE BARRIERS	30 MINUTES	20 MINUTES	NP/ W-30 MINUTES
	3 HOURS	3 HOURS	NP/ W-180 MINUTES
	2 HOURS	1.5 HOURS	NP/ W-120 MINUTES
	1 HOUR	45 MINUTES	45 MINUTES / OH-45 / W-60
	30 MINUTES	20 MINUTES	20 MINUTES / OH-20 / W-30
HORIZONTAL EXITS	2 HOURS	1.5 HOURS	NP/ W-120 MINUTES
EXIT ACCESS CORRIDORS	1 HOUR	20 MINUTES	45 MINUTES / OH-45 / W-60
	30 MINUTES	20 MINUTES	20 MINUTES / OH-20 / W-30
SMOKE BARRIERS	1 HOUR	20 MINUTES	45 MINUTES / OH-45 / W-60
SMOKE PARTITIONS	30 MINUTES	20 MINUTES	20 MINUTES / OH-20 / W-30

NOTE - WALL RATINGS ARE NOT REQUIRED FOR EACH COMPONENT, JUST A GUIDELINE TO SHOW REQUIRED RATING OF DOOR / WINDOW FOR THAT SPACE IF RATED WALLS ARE REQUIRED PER NFPA 8.3.4.2

FIRE AND SMOKE DUCT DAMPERS - PER INTERNATIONAL MECHANICAL CODE / NFPA 90A  
SEE MECHANICAL PLANS FOR LOCATIONS

FIRE SPRINKLER / SUPPRESSION SYSTEM

OCCUPANCY CLASSIFICATION	DESIGN DENSITY (GPM)	DESIGN AREA (sqft)	SPRINKLER COVERAGE AREA (sqft)
LIGHT HAZARD	0.10	1500	225
ORDINARY HAZARD 1	0.15	1500	130
ORDINARY HAZARD 2	0.20	2500	130

FIRE ALARM - INITIATION AND NOTIFICATION

FIRE ALARM WILL BE ADDRESSABLE-TYPE WITH SIGNALING LINE CIRCUITS AND NOTIFICATION APPLIANCE CIRCUITS THAT MATCH THE EXISTING CLASS  
EXISTING FACP LOCATION IS LOCATED IN THE BASEMENT  
MANUAL PULL-STATIONS SHALL BE INSTALLED PER NFPA 101 AT LOCATIONS SPECIFIED BY NFPA 72  
SMOKE DETECTORS WILL BE INSTALLED AT ALL DOORS ON HOLD-OPENS AND INTERIOR POWERED DOOR OPENERS  
SUCH DETECTORS WILL ACTIVATE A GENERAL ALARM NOT JUST SUPERVISORY SIGNAL  
SEE MECHANICAL PLANS FOR LOCATIONS OF DUCT SMOKE DETECTORS  
SMOKE DETECTION IS NOT REQUIRED TO ALL SPACES THAT OPEN TO THE CORRIDOR  
DUE TO THE USE OF QUICK RESPONSE SPRINKLERS PER NFPA 101 18.3.6.1(1)(b)  
STROBES AND SPEAKERS WILL BE INSTALLED AS REQUIRED BY NFPA 101 18.3.4.3.1 AND LOCATED PER NFPA 72.  
ADA HEIGHT REGULATIONS DEFER TO NFPA 72 2013.

PORTABLE FIRE EXTINGUISHERS

PORTABLE FIRE EXTINGUISHERS WILL BE LOCATED AT 75 FEET OF TRAVEL DISTANCE, 150 FEET ON CENTER MAXIMUM  
EXTINGUISHERS MUST CARRY A RATING OF 4A:80B:C AT A MINIMUM  
MAXIMUM FLOOR AREA PER UNIT OF "A" - 1500 SQUARE FEET  
MAXIMUM FLOOR AREA PER EXTINGUISHER - 11,250 SQUARE FEET

MINIMUM 3 EXTINGUISHERS AT 4A ARE REQUIRED FOR FLOOR AREA - MUST STILL MEET TRAVEL DISTANCE

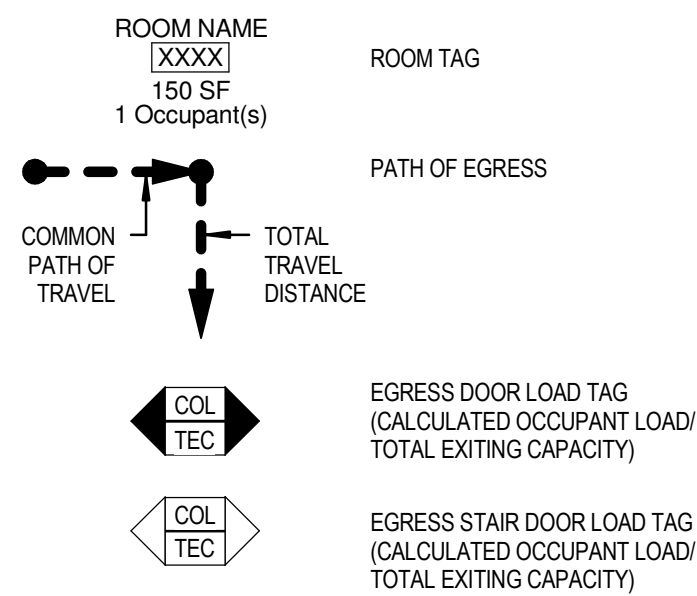
PER NFPA 10 2013, WHERE THERE IS A POTENTIAL FOR FLAMMABLE LIQUID FIRES,  
ADDITIONAL "B" EXTINGUISHERS MUST BE INSTALLED

FIRE EXTINGUISHERS MUST BE MOUNTED IN FULLY RECESSED CABINETS PER VA TIL  
AND 48" OR LESS ABOVE THE FLOOR

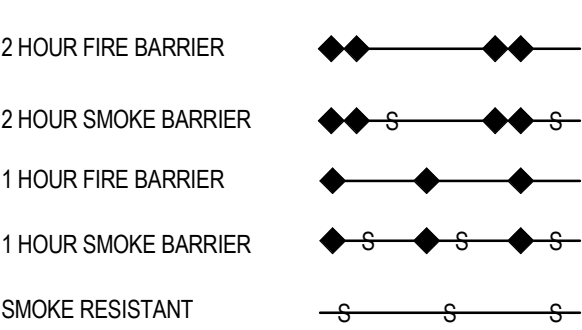
ALCOHOL-BASED HAND-RUB DISPENSERS

WHERE DISPENSERS ARE INSTALLED IN THE CORRIDOR, CORRIDOR WIDTH WILL BE A MINIMUM OF 6 FEET.  
MAXIMUM DISPENSER CAPACITY IN ROOMS, CORRIDORS, AND AREAS OPEN TO CORRIDORS SHALL BE 1.2L.  
MAXIMUM DISPENSER CAPACITY IN SUITES OF ROOMS SHALL BE 2.0L.  
WHERE AEROSOL DISPENSERS ARE USED, MAXIMUM CAPACITY SHALL BE 18oz AND LIMITED TO LEVEL 1 AEROSOLS.  
DISPENSERS WILL BE A MINIMUM OF 4 FEET HORIZONTALLY FROM THE NEXT DISPENSER.  
NOT MORE THAN 37.8L (10GALLONS) OF SOLUTION, OR 1155oz OF LEVEL 1 AEROSOLS SHALL BE IN USE OUTSIDE OF A STORAGE CABINET IN A SINGLE SMOKE COMPARTMENT.  
STORAGE OF GREATER THAN 5 GALLONS IN A SINGLE SMOKE COMPARTMENT SHALL MEET THE REQUIREMENTS OF NFPA 30 FLAMMABLE AND COMBUSTIBLE LIQUIDS CODE.  
DISPENSERS SHALL NOT BE INSTALLED:  
ABOVE AN IGNITION SOURCE FOR A DISTANCE OF 1" TO EACH SIDE OF THE IGNITION SOURCE  
TO THE SIDE OF AN IGNITION SOURCE WITHIN A 1" HORIZONTAL DISTANCE TO THE SOURCE  
BENEATH AN IGNITION SOURCE WITHIN A 1" VERTICAL DISTANCE FROM THE IGNITION SOURCE  
(MOST COMMON IGNITION SOURCES ARE ELECTRICAL OUTLETS)

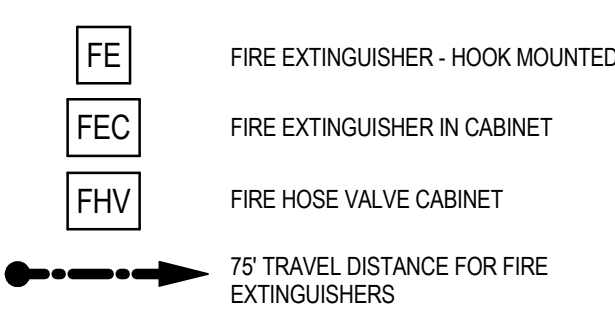
EGRESS SYMBOL LEGEND



WALL SEPARATION LEGEND



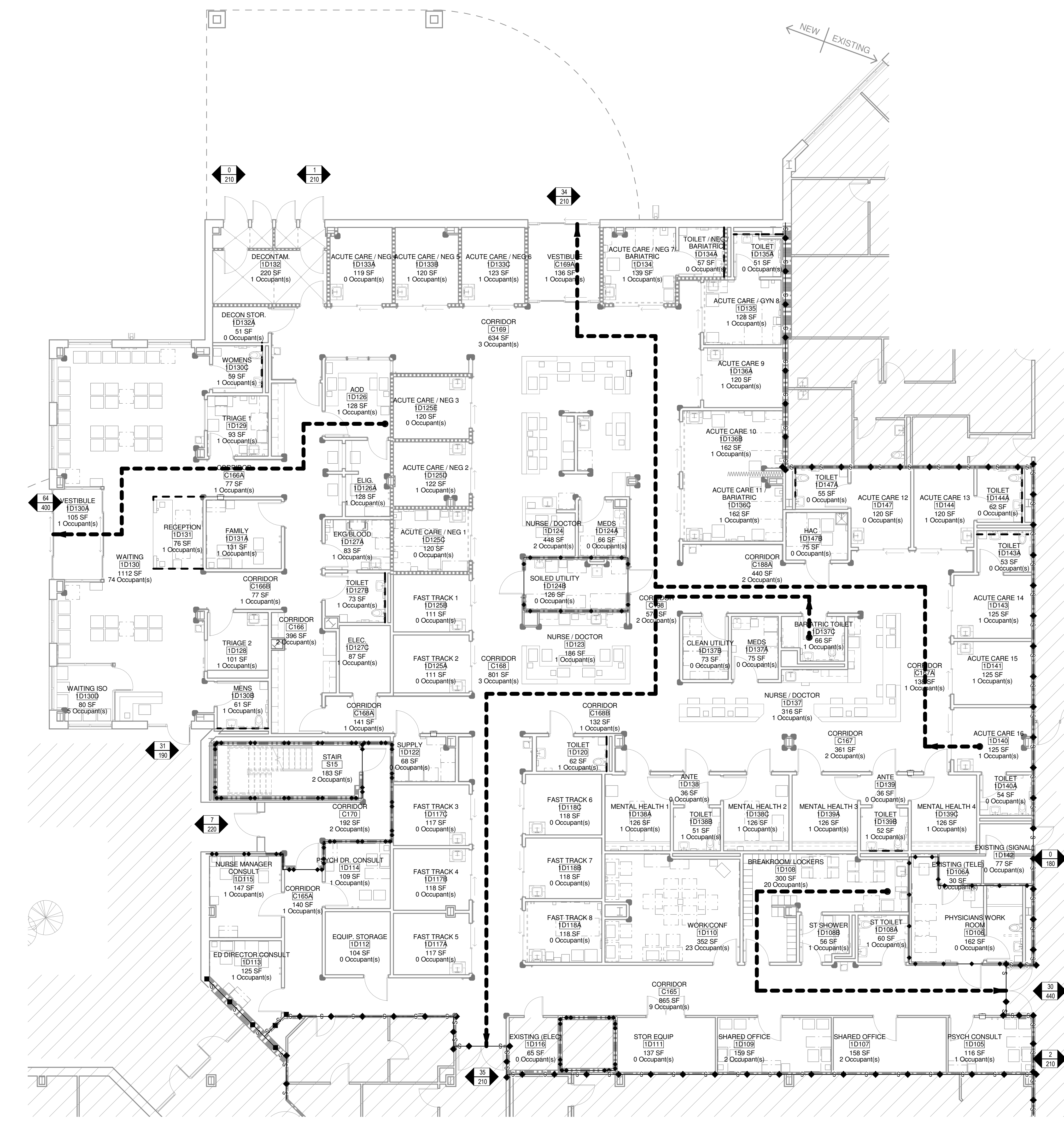
FIRE PROTECTION LEGEND



CONSTRUCTION DOCUMENTS SUBMISSION  
FULLY SPRINKLERED

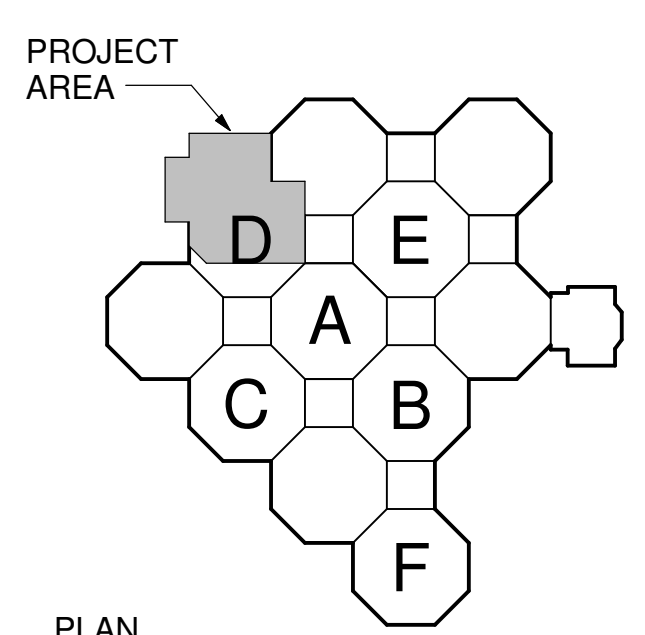
Revisions:		Date:		CONSULTANTS:		ARCHITECT/ENGINEERS:		Drawing Title LIFE SAFETY CODE ANALYSIS		Project Title EMERGENCY DEPARTMENT MENTAL HEALTH IMPROVEMENTS		Project Number CSI-112 Building Number 1		CENTRAL ARKANSAS VETERANS AFFAIRS HEALTHCARE SYSTEM			
				CIVIL: CROMWELL 101 SOUTH SPRING STREET LITTLE ROCK, AR 72201 501.372.2900		MECHANICAL, PLUMBING, ELECTRICAL, FIRE PROTECTION: CROMWELL 101 SOUTH SPRING STREET LITTLE ROCK, AR 72201 501.372.2900		BES DESIGN/BUILD		BES DESIGN/BUILD, LLC 766 Middle St, Fairhope, AL 36532 Phone: 251.990.5778 Fax: 251.990.3716		Approved: Project Director		Location LITTLE ROCK, ARKANSAS		Drawing Number GI101 Dwg. 4 of 127	
												Date 2015.03.06		Drawn BMG		Checked RLS	

three inches = one foot  
one and one half inches = one foot  
one inch = one foot  
three quarters inch = one foot  
one half inch = one foot  
one quarter inch = one foot  
one eighth inch = one foot



1 FIRST FLOOR LIFE SAFETY PLAN  
1/8" = 1'-0"

Egress Schedule			
EXIT ROUTE	Type	Exit Travel Type	DISTANCE
Acute Care 16	04 Start_End	Common Path	8'-9"
Acute Care 16	02 Middle	Total Travel	8'-9"
Acute Care 16	02 Middle	Total Travel	25'-6"
Acute Care 16	02 Middle	Total Travel	43'-0"
Acute Care 16	02 Middle	Total Travel	40'-0"
Acute Care 16	02 Middle	Total Travel	12'-6"
Acute Care 16	03 End	Total Travel	17'-11"
Acute Care 16: 6			138'-11"
Acute Care 16: 6			147'-7"
AOD	01 Start	Total Travel	13'-0"
AOD	02 Middle	Total Travel	7'-2"
AOD	02 Middle	Total Travel	29'-0"
AOD	02 Middle	Total Travel	10'-6"
AOD	03 End	Total Travel	10'-11"
AOD: 5			70'-7"
AOD: 5			70'-7"
Breakroom Lockers	01 Start	Total Travel	20'-10"
Breakroom Lockers	02 Middle	Total Travel	15'-10"
Breakroom Lockers	03 End	Total Travel	39'-9"
Breakroom Lockers: 3			76'-5"
Nurse/Doctor Shower	04 Start_End	Common Path	6'-6"
Nurse/Doctor Shower	02 Middle	Total Travel	6'-6"
Nurse/Doctor Shower	02 Middle	Total Travel	24'-6"
Nurse/Doctor Shower	02 Middle	Total Travel	15'-6"
Nurse/Doctor Shower	02 Middle	Total Travel	27'-0"
Nurse/Doctor Shower	03 End	Total Travel	56'-3"
Nurse/Doctor Shower: 5			129'-9"



0 4' 8' 16'  
SCALE: 1/8" = 1'-0"  
PLAN NORTH

KEY PLAN  
EDMH F.F.E.: 398.00'  
PROJECT AREA: 17,075 S.F.

CONSTRUCTION DOCUMENTS SUBMISSION  
FULLY SPRINKLERED

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